

What is claimed is;

1. A radio-conductive material comprising alcohol-soluble nylon and inorganic material having radiation absorbing power.

5 2. A radio-conductive material as defined in Claim 1 in which the inorganic material is bismuth iodide.

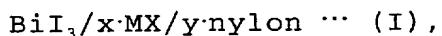
3. A radio-conductive material as defined in Claim 1 in which the alcohol-soluble nylon is composite material of nylon 6 and nylon 66.

10 4. A radio-conductive material as defined in Claim 1 in the form of a nano-composite.

5. A method of manufacturing radio-conductive material comprising the steps of dissolving alcohol-soluble nylon and inorganic material having radiation absorbing power in alcohol, 15 and evaporating the alcohol to obtain high-viscosity composite material.

6. A solid sensor having a radio-conductive layer formed of a radio-conductive material defined in Claim 1.

7. A radio-conductive material represented by the 20 following formula (I),



wherein M represents at least one alkali metal selected from the group consisting of Li, Na, K, Rb and Cs, X represents at least one halogen selected from the group consisting of F, Cl, 25 Br and I, and x and y respectively represent the ratios by weight of MX and nylon to  $\text{BiI}_3$ , x being  $0 < x \leq 1$ , and y being  $0 < y \leq 4$ .

8. A radio-conductive material as defined in Claim 7  
in the form of a nano-composite.

9. A radio-conductive material as defined in Claim 7  
in which the nylon in formula (I) is alcohol-soluble.

5 10. A radio-conductive material as defined in Claim 9  
in which the alcohol-soluble nylon is composite material of  
nylon 6 and nylon 66.

11. A radio-conductive material as defined in Claim 7  
in which the alkali halide represented by MX in formula (I)  
10 is alcohol-soluble.

12. A radio-conductive material as defined in Claim 7  
in which the alkali halide represented by MX in formula (I)  
is potassium.

13. A radio-conductive material as defined in Claim 7  
15 in which the alkali halide represented by MX in formula (I)  
is potassium fluoride

14. A radio-conductive material as defined in Claim 7  
in which  $0 < x \leq 0.2$ .

15. A radio-conductive material as defined in Claim 7  
20 in which  $0.1 < y \leq 1$ .

16. A solid sensor having a radio-conductive layer  
formed of a radio-conductive material defined in Claim 7.

17. A method of manufacturing a radio-conductive film  
of an inorganic/organic composite radio-conductive material  
25 comprising the step of pressing the inorganic/organic  
composite radio-conductive material.

18. A method as defined in Claim 17 in which the inorganic/organic composite radio-conductive material is pressed at an elevated temperature.

19. A method as defined in Claim 18 in which the elevated  
5 temperature is in the range of 50°C to 200°C.

20. A method as defined in Claim 17 in which the inorganic/organic composite radio-conductive material is pressed at not higher than 50Kg/cm<sup>2</sup>.

21. A method as defined in Claim 17 in which the  
10 inorganic/organic composite radio-conductive material is BiI<sub>3</sub>/nylon.

22. A method of manufacturing a radio-conductive film of an inorganic/organic composite radio-conductive material comprising the step of heating a film of inorganic/organic  
15 composite radio-conductive material.

23. A method as defined in Claim 22 in which the elevated temperature is in the range of 50°C to 200°C.

24. A method as defined in Claim 22 in which the inorganic/organic composite radio-conductive material is  
20 BiI<sub>3</sub>/nylon.

25. A solid sensor comprising a radio-conductive layer formed of inorganic/organic composite material and an electrode provided on the radio-conductive layer, wherein the improvement comprises that

25 the electrode is of indium.

26. A solid sensor as defined in Claim 25 in which the

inorganic/organic composite material is bismuth iodide/nylon composite material.

27. A solid sensor as defined in Claim 25 in which the nylon is soluble to alcohol.

5        28. A radiation image read-out apparatus comprising a solid sensor defined in Claim 25 and a read-out means for reading out a radiation image recorded on the solid sensor as a latent radiation image.